

AMENDMENTS TO THE CLAIMS

Please amend claims as follows:

1-123. (Cancelled).

124. **(Currently amended)** A method for fabricating an orthopedic implant prosthesis bearing, comprising the steps of:

pre-heating an ultrahigh molecular weight polyethylene (UHMWPE) preform at a temperature greater than **ambient room** temperature and less than the decomposition temperature of the UHMWPE for a period of time greater than 30 minutes;

irradiating the UHMWPE preform, thereby crosslinking the UHMWPE preform;
and

quenching reducing residual free radicals in the crosslinked UHMWPE preform by heating the irradiated UHMWPE.

125. **(Currently amended)** The method of claim 124, further comprising the steps of:

cooling the preform after the **quenching heating** step to a temperature below the melting temperature of the **irradiated** UHMWPE; and

forming the preform into a prosthetic bearing.

126. **(Currently amended)** A method for fabricating an orthopaedic implant prosthesis bearing comprising the steps of:

pre-heating an ultrahigh molecular weight polyethylene (UHMWPE) preform;

irradiating the UHMWPE preform, thereby crosslinking the UHMWPE preform;

quenching reducing residual free radicals in the crosslinked UHMWPE preform subsequent to the irradiating step by heating the irradiated UHMWPE and
forming the UHMWPE preform into a prosthetic bearing.

127. **(Currently amended)** A method for fabricating an orthopaedic implant prosthesis bearing comprising the steps of:

pre-heating an ultrahigh molecular weight polyethylene (UHMWPE) preform;

irradiating the UHMWPE preform, thereby crosslinking the UHMWPE preform;
quenching reducing residual free radicals in the crosslinked UHMWPE preform
subsequent to the irradiating step by heating the irradiated UHMWPE; and
forming the UHMWPE preform into a prosthetic bearing.

128. (Withdrawn) A method for fabricating an orthopedic implant prosthesis bearing, comprising the steps of:

melting a polyethylene preform for a period of time greater than about 30 minutes;

irradiating the polyethylene preform to crosslink the polyethylene preform; and
quenching residual free radicals in the polyethylene preform.

129. (Withdrawn) The method of claim 128, further comprising the steps of:

cooling the preform after the quenching step to a temperature below the melting temperature of the polyethylene; and

forming the preform into a prosthetic bearing.

130. (Withdrawn) A method for fabricating an orthopaedic implant prosthesis bearing comprising the steps of:

melting an ultrahigh molecular weight polyethylene preform;

irradiating the ultrahigh molecular weight polyethylene preform to crosslink the ultrahigh molecular weight polyethylene preform;

quenching residual free radicals in the ultrahigh molecular weight polyethylene preform subsequent to the irradiating step; and

forming the ultrahigh molecular weight polyethylene preform into a prosthetic bearing.

131. (Withdrawn) A method for fabricating an orthopaedic implant prosthesis bearing comprising the steps of:

melting a polyethylene preform;

irradiating the polyethylene preform to crosslink the polyethylene preform;

quenching residual free radicals in the polyethylene preform after an irradiation;
and
forming the polyethylene preform into a prosthetic bearing.

132. (Withdrawn) The method according to claim 128, wherein the polyethylene is ultrahigh molecular weight polyethylene.

133. (Withdrawn) A method for fabricating an orthopaedic implant prosthesis bearing comprising the steps of:

irradiating a polyethylene preform that has been melted, thereby crosslinking the polyethylene
quenching residual free radicals in the polyethylene preform after an irradiation;
and
forming the polyethylene preform into a prosthetic bearing.

134. (Withdrawn) The method according to claim 133, wherein the polyethylene is ultrahigh molecular weight polyethylene.

135. (Currently amended) The method of claim 124, wherein the **quenching** step **of reducing residual free radicals** is carried out by heating the irradiated UHMWPE preform to a temperature above **ambient room** temperature.

136. (Currently amended) The method of claim 126, wherein the **quenching** step **of reducing residual free radicals** is carried out by heating the irradiated UHMWPE preform to a temperature above **ambient room** temperature.

137. (Currently amended) The method of claim 127, wherein the **quenching** step **of reducing residual free radicals** is carried out by heating the irradiated UHMWPE preform to a temperature above **ambient room** temperature.

138. (Previously presented) The method of claim 124, wherein the UHMWPE preform is irradiated at a dose of about 4 Mrads to about 30 Mrads.

139. (Previously presented) The method of claim 126, wherein the UHMWPE preform is irradiated at a dose of about 4 Mrads to about 30 Mrads.

140. (Previously presented) The method of claim 127, wherein the UHMWPE preform is irradiated at a dose of about 4 Mrads to about 30 Mrads.